

**FORMING METHOD FOR RESISTANCE ELEMENT OF SEMICONDUCTOR DEVICE**

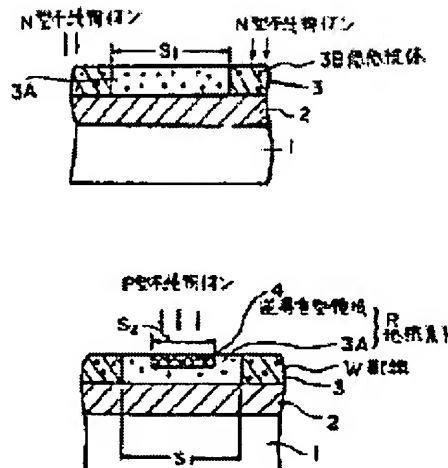
**Patent number:** JP4014863  
**Publication date:** 1992-01-20  
**Inventor:** OMORI TAKASHI  
**Applicant:** KAWASAKI STEEL CO  
**Classification:**  
- international: H01L27/04  
- european:  
**Application number:** JP19900117928 19900508  
**Priority number(s):** JP19900117928 19900508

Report a data error here

**Abstract of JP4014863**

**PURPOSE:**To obtain a resistance element having high resistance without increasing the length of the element by forming a second conductivity type region partly at the element, and reducing the sectional area of the resistance part to be conducted.

**CONSTITUTION:**Part of a high resistor 3A except a region S2 is masked with photoresist, and P-type impurity ions such as second conductivity type boron, etc., are so implanted in polycrystalline silicon 3 of the region S2 in a predetermined depth. Thus, the region S2 becomes a reverse conductivity type region 4 of second conductivity type to form a junction to a region S1 in which an N-type impurities are implanted. Thereafter, with photoresist as a mask an unnecessary part is etched to form a resistance element R of the resistor 3A and the region 4, and a wiring W is formed of a low resistor 3B. Thus, even if a current is fed in an arbitrary direction in the region 4, a current is scarcely fed, and the resistor 3A formed previously is reduced in sectional area in thickness corresponding to the region 4, thereby enhancing its resistance value.



Data supplied from the esp@cenet database - Worldwide